L&T InfotechCASE STUDY

REMOTE MANAGEABILITY, ENERGY SAVINGS AND OPERATIONAL EFFICIENCY AT INDIA'S 4TH LARGEST IT COMPANY



With 75F's solution, we gained energy savings of over 55% as well as manpower savings. Thanks to 75F Facilisight, we are able to manage the facility at the click of a button and I can allocate resources to other maintenance activities.

Mr Kishore Kumar | Sr Facility Manager, LTI



THE BACKGROUND

LTI (Larsen & Toubro Infotech) is a global IT services company headquartered in Mumbai and is ranked 4th among Indian companies in 2018. With a revenue of over \$1 Bn and over 25,000 employees, it is no surprise that they showcased the same level of commitment towards sustainable technology, seeking to provide the best working environment for employees across their facilities

When LTI Bengaluru's Facility Lead, Mr Kishore Kumar was introduced to 75F India by a partner, he says he was 'floored' by the technology. "75F demonstrated over 55% savings while giving my team the comfort of automation and remote manageability," says Kishore when asked about his reasons for hiring 75F. The challenges facing the facility team at LTI Bengaluru were primarily two-fold: a) lack of automation for the HVAC & Lighting system leading to hotspots & coldspots and a high number of employee complaints, which the FM team spent most of their time responding to; and b) energy wastage and high energy bills.

During its site survey, 75F noted an opportunity to save substantial amounts of energy via predictive, proactive automation of LTI's HVAC & Lighting systems thereby bringing in operational efficiency and remote visibility.

AT A GLANCE

Location	LTI, Whitefield Bangalore
Project	Energy Management
	+ Dynamic Chilled Water Balancing
	+ Advanced Lighting Solution
Square Footage	128,000
Installed Units	12 Nos. AHU with VFD
	Common Chiller Plant for 4 Buildings
Previous Conditions	AHU VFD running at 50 Hz with no modulation Chilled Water Actuator was manually
	modulated
	No BMS or VAVs
	No automation for lighting

THE 75F SOLUTION

After a successful pilot at LTI, 75F installed Dynamic Chilled Water Balancing Solution, Energy Management System and Advanced Lighting Solution at LTI. Facilisight, 75F's suite of web and mobile apps, that facilitates easy monitoring and control with predictive proactive automation was also included.

Dynamic Chilled Water Balancing Solution: 75F deployed an end-to-end solution for LTI's chilled water system to maintain comfort while using less chilled water and saving more energy. 75F sensors in each zone directly communicate with the Central Control Unit (CCU) – giving LTI's FM team the ability to monitor the inlet and outlet temperatures, chilled water flow rates and BTU energy consumption across the line.

Energy Management System: 75F sensors across workstations provide an overview of the real-time temperatures on the floor. 75F's system automatically modulates the VFD based on inputs from these sensors, the set-point temperature and the cooling demand in order to maintain optimal comfort at all times while saving energy.

Advanced Lighting Solution: 75F's Advanced Lighting system considers many factors about the building such as weather forecasts and location of the building along with real-time factors such as occupancy, scheduling, user preferences, etc. before determining the ideal time to adjust the lighting gradually.

75F Facilisight: Facilisight provides the facility team at LTI multi-site visibility and insights into HVAC and Lighting energy consumption. Besides automatically monitoring, managing and controlling these systems proactively, 75F also provides the FM power to control their buildings at a click.



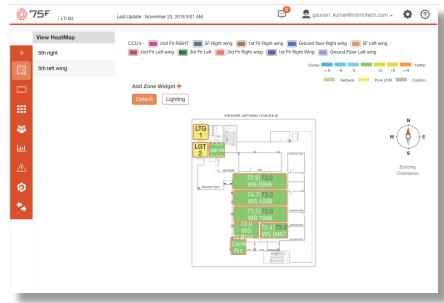
Facilisight provides insights and visibility into the HVAC and Lighting energy consumption at LTI

THE RESULT

The 75F solution at LTI delivers over **55% savings** on HVAC and lighting energy bills each month. Thanks to the automation of the entire HVAC and Lighting system at LTI, the facility team has also noticed a marked improvement in their operational efficiencies; reducing the time spent on responding to employee complaints and improving the team's productivity. Facilisight has provided the team with greater insight and control over the HVAC system in the facility. They are now able to monitor and control energy usage in real-time remotely.

At the same time, the employees at LTI are happier too. The building is being conditioned without human intervention thanks to the predictive power of 75F proprietary algorithms. The number of complaints logged in about uncomfortable temperatures has gone down considerably.

The delighted FM team at LTI plans to continue working with 75F for a series of roll-outs, starting with their Chennai office.



The FM team gains visibility and control over their facilities remotely.

It's a very innovative solution. Earlier, the team spent a lot of time responding to comfort related complaints and taking hourly readings but now thanks to 75F our productivity has improved greatly.